

PATENT CLAIMS

1. A handling system for sausages (1) comprises: a plurality of carriers in a supporting frame for handling sausages (1) on smoke sticks (8), the supporting frame (2) includes handling means (3) for removing the carriers from and/or inserting the carriers into the supporting frame (2).

2. The handling system as claimed in claim 1, wherein the handling means includes a gripping device, the gripping device has a horizontally extendable gripping arm (20) on which a gripper (22) is located.

3. The handling system as claimed in claim 2, including means for displacing the gripping device vertically.

4. The handling system as claimed in claim 3, wherein the means for displacing gripping arm (20) toothed belts (17, 25) and drives (23).

5. The handling system as claimed in claim 2, wherein the gripping arm (20) has at least one proximity sensor (40) which senses the position of the smoke sticks (8).

6. The handling system as claimed in claim 2, wherein the gripping arm (20) has a clamping device (31.1, 31.2) for gripping the smoke sticks (8).

7. The handling system as claimed in claim 6, wherein the gripping arm (20) has an ejection device (37) for ejecting the smoke sticks (8).

8. The handling system as claimed in claim 2, wherein the gripping device is situated on at least one guide pillar (12.1, 12.2).

9. The handling system as claimed in claim 2, wherein the gripping device is associated with a transporting device (41).

10. The handling system as claimed in claim 9, wherein the transporting device (41) is situated below the gripping device and is connected rotatably at one end to a base frame (11) and is connected at the other end to the gripping device.

11. The handling system as claimed in claim 2, wherein the gripping device is associated with a cutting device (56) for cutting off the sausages (1) from the smoke sticks (8).

12. The handling system as claimed in claim 11, wherein the cutting device (56) is situated on a guide rail (54.1, 54.2).

13. The handling system as claimed in claim 12, wherein the guide rail (54.1, 54.2) is located transversely with respect to the guide pillar (12.1, 12.2) to the gripping device.

14. The handling system as claimed in claim 1, wherein the sausages (1) are connected to the smoke stick (8) by a strings, and wherein a clip (10) is situated on the string (9).

15. The handling system as claimed in claim 12, wherein the cutting device (56) has an approach sensor (70).

16. The handling system as claimed in claim 2, wherein the gripping device is arranged rotatably.